

## CARGO-MATE™

### CARGO-MATE™ INSTALLATION

The Forespar® Cargo-Mate™ is the new big brother to our very popular Motor-Mate™. At 250 pounds safe working lifting load, the Cargo-Mate™ has two and one half times the capacity of the Motor-Mate™. It is also demountable for stowing away when not needed. However, that's where the similarity ends. The Cargo-Mate™ is not a "clip-on" product. It must be mounted in a manner and at a location on the boat that is structurally strong enough to support its maximum load lifting capacity. If there is any doubt in your mind as to proper installation, seek professional assistance. Forespar® does not accept responsibility for the consequences arising from the installation or use of this product, or the determination of its suitability for the purpose employed. It is important to consider the sea state surface conditions when using your Cargo-Mate™. The 250 pound safe lifting load limit does not include the additional loads imparted from a violently rolling boat. Never load your Cargo-Mate™ to the maximum 250 pounds except in calm conditions.



### LOCATION ON SAILBOATS

The typical sailboat stern pulpit does not have the strength needed to support the Cargo-Mate™. Therefore on most sailboats a suitable mounting system will be a "through deck" method at the stern deck over the lazaret or through the stern cockpit combing on boats where the cockpit extends clear back to the transom. The amount of "bury" (the length the column extends below the deck flange) determines the magnitude of the side loading on the structural members of the boat. On the following page, please see diagram #1 and Table #1. Twelve inches of bury is the recommended minimum. An aluminium deck flange casting and a universal ball-base fixture are provided. The ball-base fixture should be mounted plumb below the deck flange. This ball-base design permits the base to be mounted at up to 45° off the horizontal. Keep in mind that as the loaded Cargo-Mate™ is rotated about the column axis, so also is the consideration in elevating the strength of the boat structure to which the deck flange and ball-base will be mounted. These two components must be installed to accept the 360° change in load path as the loaded Cargo-Mate™ is rotated. If the location of the ball-base requires additional "bury" to the extent that the above deck working height of the unit is reduced too much, additional lengths of column are available. See the accessories at the end of these instructions. Both the deck flange and the ball-base are to be fastened using 5/16" (8mm) stainless steel fasteners of suitable length. Where ever bolts are used, there should be flat washers and lock washers used under the nuts.

### LOCATION ON POWER BOATS

The Cargo-Mate™ can be located on the outside of the transom or inside the cockpit at the railing. If your cockpit is surrounded by bulwarks with a narrow deck like shelf, you can cut a 3 1/2" hole and mount the deck flange over it. Place the ball-base fixture on the cockpit sole plumb below the hole. If you prefer to mount the Cargo-Mate™ on the outside of the transom, an option upper support ring is available. It should be mounted as high as possible above the ball-base, but not more than 31" above it. Mount the ball-base on the swim step plumb below the upper support ring. If your boat does not have a swim step, mount the ball-base on a metal angle bracket or a teak block.

## CARGO-MATE™ Cont.

### GENERAL ASSEMBLY INSTRUCTIONS

Lift the Cargo-Mate™ arm to the horizontal and pin the stainless steel yoke support arm to the vertical column using the lower set of holes. Install the 1/4" blue lifting line as follows. Pass the un-doubled end of the line through the hole in the winch drum axle, in through the large diameter end of the hole and out the small end. Pass it under the nylon sleeved cross bolt and down the under side of the lifting arm passing above the support yoke's cross bar. Pass it over the 2" sheave. Now pull the line through until the doubled over end is pulled down tight into the large diameter portion of the hole in the axle.

Next wind most of the line onto the drum with as much tension as possible. Now pass the free end of the line through the lifting block provided and then through the 9/32" hole closest to the outer end of the lifting arm from the under side, then back down through the other hole. Tie a knot in the end of the line and pull it back against the hole. Be sure that it is a good tight knot because its failure could put a load into Davy Jones's locker.

#### IMPORTANT

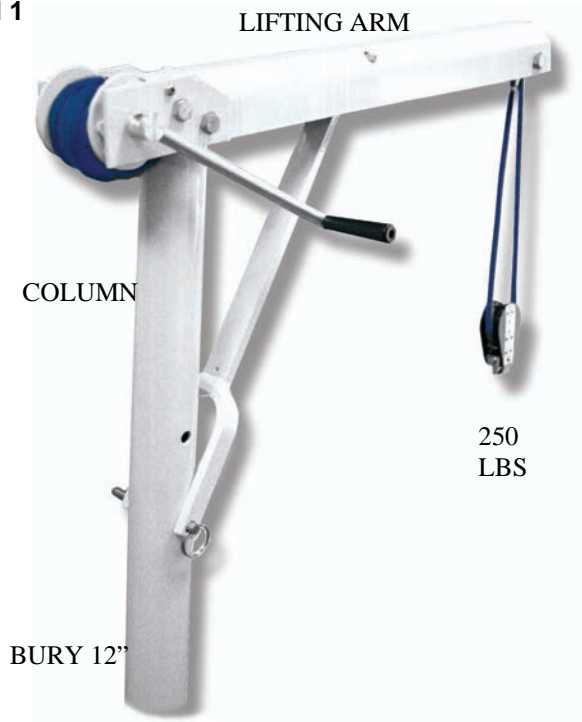
NEVER! NEVER! NEVER! Unwind the winch drum (EMPTY) clear to the very last turn. Always keep at least three or four turns on it.

When using Cargo-Mate™ the stainless steel support yoke would normally be pinned to the lowest set of holes in the vertical column. This raises the outer end of the lifting arm 14" but reduces the reach by 4". The other option is to purchase an additional 30" length of column.

TABLE 1

BURY	SIDE LOAD
12"	740 LBS
14"	633 LBS
15"	592 LBS
16"	555 LBS
17"	522 LBS
18'	493 LBS

DIAGRAM 1



### ACCESSORIES

- # 153226 30" Vertical Extension Column tube w/Sleeve
- # 153233 Stainless Steel transom mount support ring